

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A headlamp comprising:
 - a light source;
 - a shade that forms a light distribution pattern for a low beam when the shade is in a low beam position and a light distribution pattern for a high beam when the shade is in a high beam position with a light from the light source;
 - a solenoid having a plunger configured to move the shade from the low beam position to the high beam position via a magnetic force;
 - a stopper mechanism configured to stop the shade at either of the low beam position and the high beam position; and
 - a spring that configured to move the shade from the high beam position to the low beam position via an elastic force, wherein a difference between the magnetic force and the elastic force is not constant initially increases and then decreases over the stroke of the plunger, to change a moving speed of the shade as the shade moves position.
2. (Previously Presented) The headlamp according to claim 1, wherein the spring includes a cone-shaped coil spring.
3. (Previously Presented) The headlamp according to claim 1, wherein the stopper mechanism comprises:
 - a stopper including one or more protrusions; and
 - one or more abutting surfaces of the shade, wherein the one or more abutting surfaces of the shade abut against the one or more protrusions when the shade is in either of the low beam position and the high beam position.
4. (Previously Presented) The headlamp according to claim 3, wherein the one or more protrusions have angles with respect to a longitudinal direction of the solenoid, and

each of the protrusions are provided in parallel to the corresponding abutting surfaces.

5. (Previously Presented) The headlamp according to claim 3, wherein the protrusions have an elasticity.
6. (Previously Presented) The headlamp according to claim 3, wherein the shade includes four abutting surfaces.
7. (Original) The headlamp according to claim 3, wherein the stopper includes four protrusions.
8. (Original) The headlamp according to claim 1, wherein the solenoid is a pull-type solenoid.
9. (Currently Amended) The headlamp according to claim 3, A headlamp comprising:
a light source;
a shade that forms a light distribution pattern for a low beam when the shade is in a low beam position and a light distribution pattern for a high beam when the shade is in a high beam position with a light from the light source;
a solenoid configured to move the shade from the low beam position to the high beam position via a magnetic force;
a stopper mechanism configured to stop the shade at either of the low beam position and the high beam position; and
a spring configured to move the shade from the high beam position to the low beam position via an elastic force, wherein a difference between the magnetic force and the elastic force to change a moving speed of the shade as the shade moves position,
wherein the stopper mechanism comprises:
a stopper including one or more protrusions; and

one or more abutting surfaces of the shade, wherein the one or more abutting surfaces of the shade abut against the one or more protrusions when the shade is in either of the low beam position and the high beam position,
wherein the shade slides along a surface of the stopper when the solenoid and spring move the shade.

10. (Previously Presented) The headlamp according to claim 1, wherein the elastic force of the spring changes as the spring shifts position.
11. (Previously Presented) The headlamp according to claim 1, wherein the spring is positioned between the solenoid and a portion of the shade.
12. (Previously Presented) The headlamp according to claim 1, wherein the magnetic force of the solenoid changes as the solenoid shifts position.
13. (Previously Presented) A headlamp comprising:
 - a light source;
 - a shade that forms a light distribution pattern for a low beam when the shade is in a low beam position and a light distribution pattern for a high beam when the shade is in a high beam position with a light from the light source;
 - a solenoid that slides the shade from the low beam position to the high beam position;
 - a stopper mechanism that stops the shade at either of the low beam position and the high beam position; and
 - a spring that slides the shade from the high beam position to the low beam position,
wherein when the solenoid and spring move the shade, the shade slides substantially parallel to an optic axis of the light source.

14. (Previously Presented) The headlamp according to claim 1, wherein at least part of the shade is curved to form a hollow portion, and the light source is positioned in the hollow portion.
15. (Currently Amended) ~~The headlamp according to claim 1, A headlamp comprising:~~
a light source;
a shade that forms a light distribution pattern for a low beam when the shade is in a low beam position and a light distribution pattern for a high beam when the shade is in a high beam position with a light from the light source;
a solenoid configured to move the shade from the low beam position to the high beam position via a magnetic force;
a stopper mechanism configured to stop the shade at either of the low beam position and the high beam position; and
a spring configured to move the shade from the high beam position to the low beam position via an elastic force, wherein a difference between the magnetic force and the elastic force to change a moving speed of the shade as the shade moves position,
wherein when the solenoid and spring move the shade, the shade slides on a surface of the stopper mechanism.